

Amendments to the Specification

Please replace the paragraph beginning at page 5, line 3 with the following amended paragraph:

The top pole 14 is preferably made of magnetic material preferably Fe based alloys like NiFeCo, NiFe, FeTaN, FeAlN or any other iron nitrate with Hf, ~~Zr, Pa~~ or Zr additives. The seed layer 26 can be formed of the materials like those used in the top pole by sputtering, or electroplating. The shared pole of the bottom pole 12 is preferably made of Fe based alloy. The magnetic material 22 deposited on the shared pole is preferably formed of high moment Fe-based alloy. The nonmagnetic regions 24 are preferably formed of alumina, SiO₂, SiN, Ti. Alternatively, the magnetic and nonmagnetic regions 22, 24 can be eliminated so that the bottom pole 12 is flat and does not have mesa.

Please replace the paragraph beginning at page 6, line 1 with the following amended paragraph:

The method of fabricating a head according to a preferred embodiment of this invention will now be described with reference to FIGs. 6-10. A shared pole material is first deposited on a reader gap. Deposition can be done by electroplating or any vacuum technique such as sputtering. The deposited material can be as thick as 2 um to 5 um of the gap material which can be composed of alternating layers of magnetic and non-magnetic material, is then deposited on the pole material via electroplating (i.e., NiPd) or sputtering Al₂O₃, SiN, SiO₂. The gap material is patterned with a photoresist layer and has a width less than the design width of the top pole. An ion mill is used to remove the gap material on either side of photoresist. The variety of writer gap slope angles can be reached through a careful selection of the mill angle and mill energy. A lift off operation removes the photoresist layer used in the definition of the writer gap shape. A seed layer, ~~20 26~~ and 30 and top pole, pole 14, defined in FIGs. 1 to 5, are deposited through a thick photoresist mask carefully aligned with writer gap feature (not shown in a drawing). The seed layer should have a magnetic moment B_{sat} higher than 1 Tesla, preferably higher than the magnetic material used in the top pole. The seed layer thickness can be from 500 Angstroms to 300 Angstroms. The seed layer defines the structure of the first top pole. In the next step, a wet etch chemical removes the thick photoresist and is followed by an ion mill process to remove the seed layer.